

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

We claim:

1-3. (cancelled)

4. (currently amended) A method of manipulating neuronal ion channels, comprising: transfecting a cell that expresses an mRNA encoding a Kv3.4 protein with a vector encoding an siRNA directed against said mRNA encoding a Kv3.4 protein, wherein said siRNA targets positions 2222-2283 a region of a Kv3.4 nucleic acid described by GenBank Accession Number X62841 starting with gcagaatggtgacgctaat and ending with ggcagtgttgagccgaaac, and wherein said siRNA is capable of inhibiting Kv3.4 expression in said cell, and wherein said cell is located in vitro or ex vivo.

5-9. (cancelled)

10. (previously presented) The method of claim 4, further comprising the step of transplanting said cell into a subject.

11-16. (cancelled).

17. (previously presented) The method of claim 4, wherein said siRNA is directed toward a Kv3.4 target selected from the group consisting of SEQ ID NOs: 3 and 4.